Effect of Indole-3-Butyric Acid (IBA) on Rooting of Date Palm (*Phoenix dactylifera* L. 'Kabkab') Off-Shoots

A. Shahhosseini and A.R. Shahsavar*B

This research was carried out to evaluate the effects of indole-3- butyric acid on rooting of date palm (Kabkab cultivar) off-shoots with different weights. The experiment was performed as a completely randomized design consisted of four treatments and four replications on thirty-two date palm off-shoots with weight of 2-6 kg or 8-12 kg. The treatments included the application of indole butyric acid at the rate of 0 (control), 1000, 2000 and 4000 mg L⁻¹. The results showed that 4000 mg L⁻¹ indole butyric acid provided the highest number of main and lateral roots, total number of roots (main and lateral), length of main roots, diameter of main roots, weight of main and lateral roots, total weight of roots (main and lateral) and rooting percentage on the off-shoots with weight of 2- 6 kg and 8-12 kg which was significantly different with compared to control treatment at 5% probability level. Therefore, the highest rooting rate can be produced by the application of indole butyric acid in low weight of (2-6 kg) date palm off-shoots and their used effectively for propagation and expansion cultivated area.

Keywords: Growth regulator, Rooting percentage, Propagation.

^{1.} Ph.D. Student and Associate Professor, Department of Horticultural Science, School of Agriculture, Shiraz University, Shiraz, Iran, respectively.

^{*}Corresponding author, Email:(shahsava@shirazu.ac.ir).